

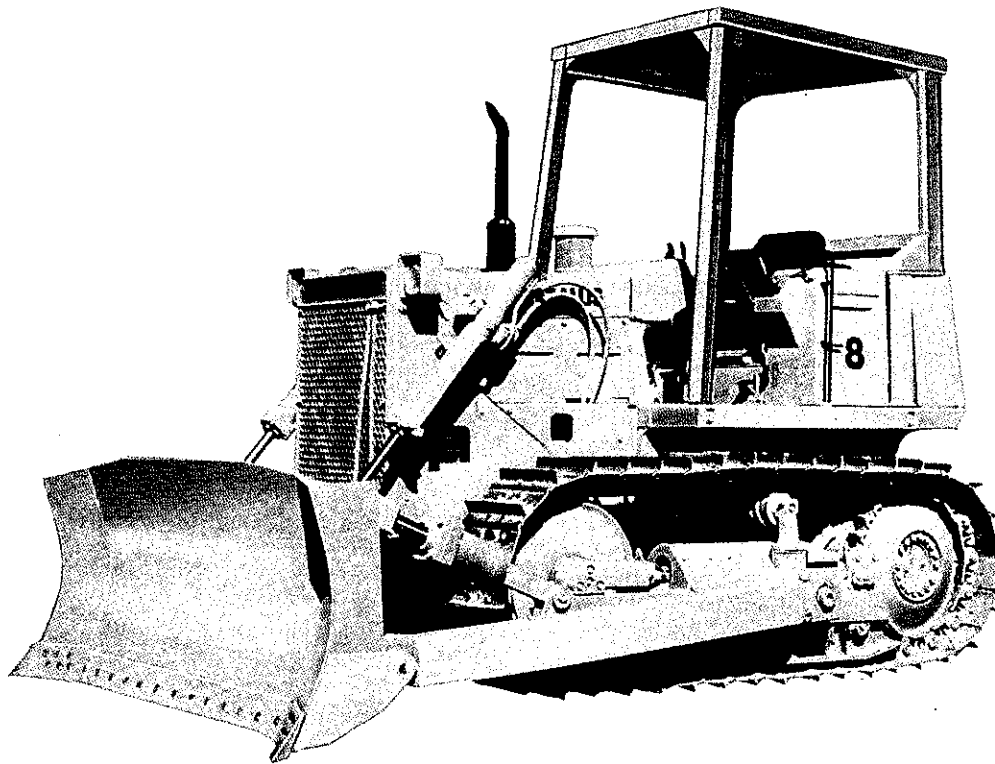


Illustration includes
optional equipment

8 Crawler Tractor

TORQUE CONVERTER W/POWER SHIFT ... **87 Flywheel H.P.**
OIL MASTER CLUTCH W/POWER SHIFT

GRAVITY WEIGHT WITH ROPS CANOPY
Semi-U dozer ... 21,300 lbs. (9660 kg)
Full U dozer ... 21,300 lbs. (9660 kg)

PROFITABILITY

• Dozing ability ... Semi-U blade w/optional
equipment capable of pushing 100,000 cu yd
load 100 ft in 1 hr.

SPECIFICATIONS



ENGINE

Rated horsepower (SAE) 37
Net horsepower 35
Pin horsepower 31
Rated torque (SAE) 101
Net torque 95
Pin torque 81
Model 603/130MT
Type Diesel, 4 cycle, naturally aspirated, direct injection
Governed RPM 2100
Number of cylinders 4
Bore and stroke 4.63 x 5.12" (118 x 130 mm)
Displacement 329.4 cu. in. (5.40 l)
Lubrication Full pressure
Oil No. 2 Diesel

Standard horsepower of the vehicle ending under SAE standard conditions of 68°F (20°C) and 29.92" (745 mm) Hg. (air reductions have been made for fan, alternator, lube oil pump, water pump, air cleaner, fuel pump, and muffler).

Net horsepower in the International System of Units (ISO) 26.5 (19) horsepower (SAE) 35 (25) (17) (12) horsepower.

Net horsepower of the vehicle ending under ISO standard conditions of 68°F (20°C) and 29.92" (745 mm) Hg. (air reductions have been made for fan, alternator, lube oil pump, water pump, air cleaner, fuel pump, and muffler).



ELECTRICAL SYSTEM

Voltage 24 V
Standard alternator 26 amp
Battery Amp/Hour rating 77

TRANSMISSION

TORQUE CONVERTER AND POWER SHIFT



TORQUE CONVERTER

Type Single-stage, single phase
Torque multiplication 2.3 to 1



TRANSMISSION

Type Power-shift, countershaft, constant mesh
Actuation Single lever
Clutches Multi-disc hydraulic
Lubrication Full pressure

SPEEDS AND DRAWBAR PULLS

Gear	SPEEDS		DRAWBAR PULLS	
	MPH	Km/h	Lbs.	Kg.
Forward				
1st	0-2.3	(0-3.7)	37,120	(16,838)
2nd	0-3.5	(0-5.7)	23,040	(10,452)
3rd	0-6.2	(0-9.9)	11,760	(5,343)
Reverse				
1st	0-2.7	(0-4.4)	30,010	(13,613)
2nd	0-4.2	(0-6.7)	18,550	(8,413)
3rd	0-7.2	(0-11.6)	9,350	(4,242)

AUTOMATIC OIL MASTER CLUTCH AND POWER SHIFT



CLUTCH

Type Dual plate oil bath
Operation Controlled automatically
Actuation by transmission shift lever



TRANSMISSION

Type Power-shift, countershaft, constant mesh
Actuation Single lever
Clutches Multi-disc hydraulic
Lubrication Full pressure

SPEEDS AND DRAWBAR PULLS

Gear	SPEEDS		DRAWBAR PULLS	
	MPH	Km/h	Lbs.	Kg.
Forward				
1st Lo	1.7	(2.7)	19,800	(8,950)
2nd Lo	2.5	(4.0)	12,590	(5,710)
1st Hi	3.7	(6.0)	7,760	(3,530)
2nd Hi	5.6	(9.0)	4,060	(1,850)
Reverse				
1st Lo	2.0	(3.2)	15,870	(7,200)
2nd Lo	3.0	(4.9)	9,950	(4,530)
1st Hi	4.5	(7.2)	5,950	(2,700)
2nd Hi	6.8	(10.9)	2,780	(1,260)



STEERING AND BRAKING

Type Hydraulic clutches and mechanical brakes.
Clutches and brakes are oil-cooled and lubricated for long service life.

Total friction surface 20
Total friction area 886 sq. in. (5716 cm²)
Each clutch assembly 886 sq. in. (5716 cm²)
Total friction area 94 sq. in. (605 cm²)
Each brake assembly 94 sq. in. (605 cm²)



FINAL DRIVES

Type Double reduction
Ratio 9.95 to 1
Lubrication Oil bath



TRACK

Non-coiled track Hydraulic track adjusters. One piece disc type flange mounted bolt on sprockets. Disc idlers, track guiding guards, track rollers, carrier rollers, and idlers are lubricated for long life.

Track frame Oscillating
Track rollers (each side) 6
Double flange 2
Single flange 3
Carrier rollers (each side) 1
Number of shoes (each side) 37
Width of standard track shoe 17 1/2" (450 mm)
Length of track on ground 78.3" (1990 mm)
Ground contact area 2,776 sq. in. (17910 cm²)
Gauge between shoes 60.2 in. (1530 mm)
Ground clearance 15.2" (386 mm)
Ground height 2" (52 mm)
Track oscillation 10.6" (269 mm)



HYDRAULIC SYSTEM

Reservoir Closed
Cylinders Double acting
Dozer (two) 31.5 x 31.5" (80 x 800 mm)
Tilt (left side) 6.12 x 5.31" (130 x 135 mm)
Pump Gear type
Capacity @ 2100 RPM of engine 30 gal./min. (114 l./min)
Control valve Three spool
Relief valve pressure 1990 psi (140 Kg/cm²)
Actuation 3 levers
Dozer Raise, hold, lower, float
Tilt (left side) Left and right



FILTRATION SYSTEM

Engine One spin on 10 micron (paper element)
Filter One spin on 20 micron paper element
One replaceable 5 micron paper element
Air cleaner Dry type with inner safety element and pre-cleaner

TRANSMISSION (TORQUE CONVERTER and CLUTCH)

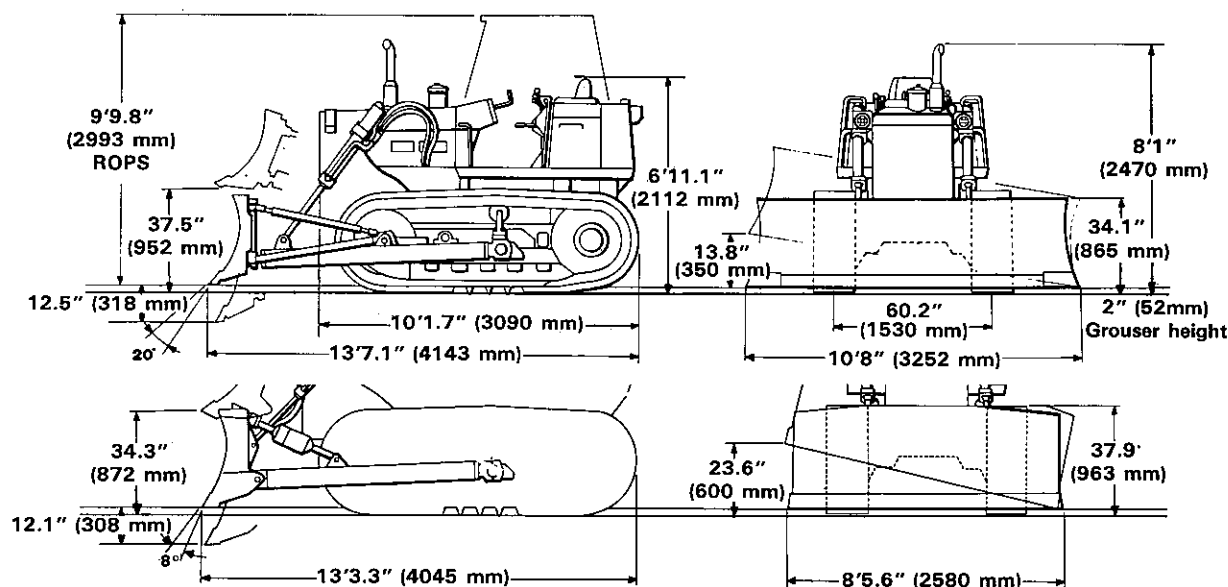
Filter Full flow 100 micron metallic element with magnetic plug
Delivery Full flow 30 micron metallic
STEERING AND BRAKING
Filter 100 micron metallic element with magnetic plug
Delivery 15 micron paper
HYDRAULIC
Filter 100 micron metallic with magnetic plug
Return 20 micron replaceable paper element



CAPACITIES

Lube oil 37 U.S. gal. (14 ltr)
Coolant 6.6 U.S. gal. (25 ltr)
Fuel tank 502 U.S. gal. (190 ltr)
Transmission, torque converter 7.4 U.S. gal. (28 ltr)
Final drives, clutch 6.5 U.S. gal. (24.5 ltr)
Operating fluids 4.1 U.S. gal. (15.5 ltr)
Final drives (both sides) 3.0 U.S. gal. (11.4 ltr)
Hydraulic system 11.9 U.S. gal. (45 ltr)

DIMENSIONS — REFERRED TO HEIGHT UNDER SAE J 173



DOZER

DOZER

Semi-U

Angle

MOLDBOARD

Width	8'5.6" (2580 mm)
Height	37.9" (963 mm)
Max. lift above ground	34.3" (872 mm)
Max. drop below ground	12.1" (308 mm)
Max. tilt — either end	23.6" (600 mm)
Max. pitch adjustment	8°

10'8" (3252 mm)
34.1" (865 mm)
37.5" (952 mm)
12.5" (318 mm)
13.8" (350 mm)
20°

CUTTING EDGES

Center section — reversible	Yes
Width	5.9" (150 mm)
Thickness	.63" (16 mm)
Length	75" (1905 mm)

Yes
5.9" (150 mm)
.63" (16 mm)
101.2" (2570 mm)

END OR CORNER BITS

Width	7.4" (189 mm)
Thickness	.63" (16 mm)
Length	14.2" (361 mm)
Interchangeable	No
Replaceable	Yes

7.6" (192 mm)
.79" (20 mm)
13.3" (339 mm)
No
Yes



DIMENSIONS

Bare Unit Width — 6'6" (1980 mm)
Shipping Weight — 17,460 lbs. (7920 kg)

Units	Overall Length	Operating Weights	Max. Track Shoe Allowance
Semi-U — P.S. w/Clutch or Conv. w/o ROPS Cab or Canopy	13'3.3" (4045 mm)	20,680 lbs. (9380 kg)	23.6" (600 mm)
Angle — P.S. w/Clutch or Conv. w/o ROPS Cab or Canopy	13'7.1" (4143 mm)	20,680 lbs. (9380 kg)	23.6" (600 mm)
ROPS Canopy Weight —		620 lbs. (280 kg)	
ROPS Cab Weight —		1,500 lbs. (680 kg)	
Over-all length w/semi-U blade and parallelogram ripper	17'4½" (5300 mm)		



RIPPERS

Model

SP8

* SR8

Type

Parallelogram Vertical Cylinder

Radial Vertical Cylinder

Weight (incl. hydraulics)

2734 lbs (1240 kg) w/3 shanks

1841 lbs (835 kg) w/1 shank

Max. ripping depth

18.5" (470 mm)

16.5" — 22.4" (420 — 570 mm)

Ripping width

59.4" (1510 mm)

—

Overall width

73.6" (1870 mm)

32.9" (836 mm)

Shanks - number

3

1

Shank depth adjustment holes

Fixed

2

Teeth type

Esco

Esco

Clearance under raised shanks

17.3" (440 mm)

35.8" (910 mm)

Clearance beam fully lowered

5.1" (130 mm)

—

Spacing — center to center of shank

27.9" (709 mm)

—

Hydraulic cylinders:

1 — double acting

1 — double acting

— bore and stroke

5.5"x21.2" (140x538 mm)

5.5"x21.2" (140x538 mm)

*SR8 Radial Ripper Available Only in Certain Areas.

Beam, cross section

7.7" x 6.7" (200 x 170 mm)

Shank, cross section

7.7" x 2.4" (200 x 60 mm)

7.1" x 2.4" (180 x 60 mm)

Shank, weight (w/tooth)

121 lbs (55 kg)

198 lbs (90 kg)

Tooth weight

7.1 lbs (3.2 kg)

12.3 lbs (5.6 kg)



STANDARD EQUIPMENT

- Air cleaner, w/ service indicator
- Alternator, 26A
- Anti-freeze
- Back-up alarm
- Battery, dry charge
- Blade —
- Semi-U, includes left hydraulic tilt cylinder and equistatic compensating device
- Angle
- Decelerator
- Drawbar, fixed

- Fan, blower
- Guards —
- Full track roller, crankcase and transmission track guiding
- Hood side plates
- Hourmeter and tachometer
- Hydraulics, 3 spool valve
- Light mounting brackets
- Muffler
- Pull hook, front
- Radiator, abrasion protected core (and screens)
- ROPS canopy
- Seat & arm rests
- Seat belt

- Starting, 24V electric
- Tool kit
- Track adjusters, hydraulic
- Track carriers, 1 each side
- Track rollers, 5 each side
- Track chain, 17 1/2" (450 mm)
- Transmission
- Torque converter with power shift & chromalox oil cooler (chromalox oil cooler)
- Vandalism protection, protection of battery box, fuel tank, and engine and panel radiator (no padlocks or padlocks)



OPTIONAL EQUIPMENT

- Lighting, 2 head, 1 rear flood
- Rippers
- ROPS cab
- Swinging drawbar
- Single lever control for dozer & tilt

- Track shoes, 15 1/2" (400 mm)
- Track shoes, 19 1/2" (500 mm)
- Rear screen for canopy
- Sweeps
- Padlocks — for vandalism protection



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